O W E   0280

CRF Errors Corrected by th STIC tems Branch

Serial Number: _09/451,939_

CRF Processing Dat : _12/16/99_
Edited by: _____
Verified by: _____AV_____ (STIC staff)

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically:
_____

☑ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☑ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:
_____

ENTERED

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
_____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
_____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:
_____

☐ Deleted extra, invalid, headings used by an applicant, specifically:
_____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as_____ .

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____
_____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:
_____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐ Other:
_____
_____
_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

OIPE

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION *US/09/451,939*

DATE: 12/17/1999
TIME: 04:38:12

INPUT SET: S34265.raw

> **This Raw Listing contains the General Information Section and up to the first 5 pages.**

```
 1                                    SEQUENCE LISTING
 2
 3     (1)      General Information:
 4
 5        (i) APPLICANTS: Miao, Ningning
 6                        Wang, Monica
 7                        Mahanthappa, Nagesh K.
 8                        Jin, Ping
 9                        Pang, Kevin
10
11       (ii) TITLE OF INVENTION: Method of Treating Dopaminergic and
12            GABA-nergic Disorders
13
14      (iii) NUMBER OF SEQUENCES: 22
15
16       (iv) CORRESPONDENCE ADDRESS:
17            (A) ADDRESSEE: FOLEY, HOAG & ELIOT LLP
18            (B) STREET: ONE POST OFFICE SQUARE
19            (C) CITY: Boston
20            (D) STATE: MA
21            (E) COUNTRY: USA
22            (F) ZIP: 02109
23
24        (v) COMPUTER READABLE FORM:
25            (A) MEDIUM TYPE: Floppy disk
26            (B) COMPUTER: IBM PC compatible
27            (C) OPERATING SYSTEM: PC-DOS/MS-DOS
28            (D) SOFTWARE: AscII (text)
29
30       (vi) CURRENT APPLICATION DATA:
31            (A) APPLICATION NUMBER: US 08/900,220
32            (B) FILING DATE: 24-JUL-1997
33            (C) CLASSIFICATION:
34
35     (viii) ATTORNEY/AGENT INFORMATION:
36            (A) NAME: Vincent, Matthew P.
37            (B) REGISTRATION NUMBER: 36,709
38            (C) REFERENCE/DOCKET NUMBER: ONV-044.01
39
40       (ix) TELECOMMUNICATION INFORMATION:
41            (A) TELEPHONE: (617) 832-1000
42            (B) TELEFAX: (617) 832-7000
43
44
45     (2) INFORMATION FOR SEQ ID NO:1:
46            (i) SEQUENCE CHARACTERISTICS:
```

Does Not Comply Corrected Diskette Needed

↙ (vii) PRIOR APP DATA:

-->

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/451,939

DATE: 12/17/1999
TIME: 04:38:13

INPUT SET: S34265.raw

```
47              (A) LENGTH: 1277 base pairs
48              (B) TYPE: nucleic acid
49              (C) STRANDEDNESS: both
50              (D) TOPOLOGY: linear
51
52        (ii) MOLECULE TYPE: cDNA
53
54        (ix) FEATURE:
55              (A) NAME/KEY: CDS
56              (B) LOCATION: 1..1275
57
58        (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
59
60   ATG GTC GAA ATG CTG CTG TTG ACA AGA ATT CTC TTG GTG GGC TTC ATC      48
61   Met Val Glu Met Leu Leu Leu Thr Arg Ile Leu Leu Val Gly Phe Ile
62     1               5                  10                  15
63
64   TGC GCT CTT TTA GTC TCC TCT GGG CTG ACT TGT GGA CCA GGC AGG GGC      96
65   Cys Ala Leu Leu Val Ser Ser Gly Leu Thr Cys Gly Pro Gly Arg Gly
66                20                  25                  30
67
68   ATT GGA AAA AGG AGG CAC CCC AAA AAG CTG ACC CCG TTA GCC TAT AAG     144
69   Ile Gly Lys Arg Arg His Pro Lys Lys Leu Thr Pro Leu Ala Tyr Lys
70            35                  40                  45
71
72   CAG TTT ATT CCC AAT GTG GCA GAG AAG ACC CTA GGG GCC AGT GGA AGA     192
73   Gln Phe Ile Pro Asn Val Ala Glu Lys Thr Leu Gly Ala Ser Gly Arg
74        50                  55                  60
75
76   TAT GAA GGG AAG ATC ACA AGA AAC TCC GAG AGA TTT AAA GAA CTA ACC     240
77   Tyr Glu Gly Lys Ile Thr Arg Asn Ser Glu Arg Phe Lys Glu Leu Thr
78    65                  70                  75                  80
79
80   CCA AAT TAC AAC CCT GAC ATT ATT TTT AAG GAT GAA GAG AAC ACG GGA     288
81   Pro Asn Tyr Asn Pro Asp Ile Ile Phe Lys Asp Glu Glu Asn Thr Gly
82                85                  90                  95
83
84   GCT GAC AGA CTG ATG ACT CAG CGC TGC AAG GAC AAG CTG AAT GCC CTG     336
85   Ala Asp Arg Leu Met Thr Gln Arg Cys Lys Asp Lys Leu Asn Ala Leu
86               100                 105                 110
87
88   GCG ATC TCG GTG ATG AAC CAG TGG CCC GGG GTG AAG CTG CGG GTG ACC     384
89   Ala Ile Ser Val Met Asn Gln Trp Pro Gly Val Lys Leu Arg Val Thr
90               115                 120                 125
91
92   GAG GGC TGG GAC GAG GAT GGC CAT CAC TCC GAG GAA TCG CTG CAC TAC     432
93   Glu Gly Trp Asp Glu Asp Gly His His Ser Glu Glu Ser Leu His Tyr
94           130                 135                 140
95
96   GAG GGT CGC GCC GTG GAC ATC ACC ACG TCG GAT CGG GAC CGC AGC AAG     480
97   Glu Gly Arg Ala Val Asp Ile Thr Thr Ser Asp Arg Asp Arg Ser Lys
98   145                 150                 155                 160
99
```

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION   US/09/451,939

DATE: 12/17/1999
TIME: 04:38:13

INPUT SET: S34265.raw

```
                                                                              528
100   TAC GGA ATG CTG GCC CGC CTC GCC GTC GAG GCC GGC TTC GAC TGG GTC
101   Tyr Gly Met Leu Ala Arg Leu Ala Val Glu Ala Gly Phe Asp Trp Val
                        165                 170                 175
102
                                                                              576
103   TAC TAC GAG TCC AAG GCG CAC ATC CAC TGC TCC GTC AAA GCA GAA AAC
104   Tyr Tyr Glu Ser Lys Ala His Ile His Cys Ser Val Lys Ala Glu Asn
105                 180                 185                 190
106
                                                                              624
107   TCA GTG GCA GCG AAA TCA GGA GGC TGC TTC CCT GGC TCA GCC ACA GTG
108   Ser Val Ala Ala Lys Ser Gly Gly Cys Phe Pro Gly Ser Ala Thr Val
109             195                 200                 205
110
                                                                              672
111   CAC CTG GAG CAT GGA GGC ACC AAG CTG GTG AAG GAC CTG AGC CCT GGG
112   His Leu Glu His Gly Gly Thr Lys Leu Val Lys Asp Leu Ser Pro Gly
113         210                 215                 220
114
                                                                              720
115   GAC CGC GTG CTG GCT GCT GAC GCG GAC GGC CGG CTG CTC TAC AGT GAC
116   Asp Arg Val Leu Ala Ala Asp Ala Asp Gly Arg Leu Leu Tyr Ser Asp
117   225                 230                 235                 240
118
                                                                              768
119   TTC CTC ACC TTC CTC GAC CGG ATG GAC AGC TCC CGA AAG CTC TTC TAC
120   Phe Leu Thr Phe Leu Asp Arg Met Asp Ser Ser Arg Lys Leu Phe Tyr
121                 245                 250                 255
122
                                                                              816
123   GTC ATC GAG ACG CGG CAG CCC CGG GCC CGG CTG CTA CTG ACG GCG GCC
124   Val Ile Glu Thr Arg Gln Pro Arg Ala Arg Leu Leu Leu Thr Ala Ala
125                 260                 265                 270
126
                                                                              864
127   CAC CTG CTC TTT GTG GCC CCC CAG CAC AAC CAG TCG GAG GCC ACA GGG
128   His Leu Leu Phe Val Ala Pro Gln His Asn Gln Ser Glu Ala Thr Gly
129             275                 280                 285
130
                                                                              912
131   TCC ACC AGT GGC CAG GCG CTC TTC GCC AGC AAC GTG AAG CCT GGC CAA
132   Ser Thr Ser Gly Gln Ala Leu Phe Ala Ser Asn Val Lys Pro Gly Gln
133         290                 295                 300
134
                                                                              960
135   CGT GTC TAT GTG CTG GGC GAG GGC GGG CAG CAG CTG CTG CCG GCG TCT
136   Arg Val Tyr Val Leu Gly Glu Gly Gly Gln Gln Leu Leu Pro Ala Ser
137   305                 310                 315                 320
138
                                                                             1008
139   GTC CAC AGC GTC TCA TTG CGG GAG GAG GCG TCC GGA GCC TAC GCC CCA
140   Val His Ser Val Ser Leu Arg Glu Glu Ala Ser Gly Ala Tyr Ala Pro
141             325                 330                 335
142
                                                                             1056
143   CTC ACC GCC CAG GGC ACC ATC CTC ATC AAC CGG GTG TTG GCC TCC TGC
144   Leu Thr Ala Gln Gly Thr Ile Leu Ile Asn Arg Val Leu Ala Ser Cys
145         340                 345                 350
146
                                                                             1104
147   TAC GCC GTC ATC GAG GAG CAC AGT TGG GCC CAT TGG GCC TTC GCA CCA
148   Tyr Ala Val Ile Glu Glu His Ser Trp Ala His Trp Ala Phe Ala Pro
149         355                 360                 365
150
                                                                             1152
151   TTC CGC TTG GCT CAG GGG CTG CTG GCC GCC CTC TGC CCA GAT GGG GCC
152
```

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/451,939

DATE: 12/17/1999
TIME: 04:38:14

INPUT SET: S34265.raw

```
                 Phe Arg Leu Ala Gln Gly Leu Leu Ala Ala Leu Cys Pro Asp Gly Ala
153                                         375                   380
154              ATC CCT ACT GCC GCC ACC ACC ACC ACT GGC ATC CAT TGG TAC TCA CGG      1200
155              Ile Pro Thr Ala Ala Thr Thr Thr Thr Gly Ile His Trp Tyr Ser Arg
156                                  390                   395                 400
157              CTC CTC TAC CGC ATC GGC AGC TGG GTG CTG GAT GGT GAC GCG CTG CAT      1248
158              385
159              Leu Leu Tyr Arg Ile Gly Ser Trp Val Leu Asp Gly Asp Ala Leu His
160                                      405                   410             415      1277
161
162
163              CCG CTG GGC ATG GTG GCA CCG GCC AGC TG
164              Pro Leu Gly Met Val Ala Pro Ala Ser
165                              420                   425
166
167              (2) INFORMATION FOR SEQ ID NO:2:
168
169                  (i) SEQUENCE CHARACTERISTICS:
170                      (A) LENGTH: 1190 base pairs
171                      (B) TYPE: nucleic acid
172                      (C) STRANDEDNESS: both
173                      (D) TOPOLOGY: linear
174
175                  (ii) MOLECULE TYPE: cDNA
176
177                  (ix) FEATURE:
178                      (A) NAME/KEY: CDS
179                      (B) LOCATION: 1..1191
180
181                  (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
182              ATG GCT CTG CCG GCC AGT CTG TTG CCC CTG TGC TGC TTG GCA CTC TTG        48
183
184              Met Ala Leu Pro Ala Ser Leu Leu Pro Leu Cys Cys Leu Ala Leu Leu
185              1                   5                   10                  15
186
187              GCA CTA TCT GCC CAG AGC TGC GGG CCG GGC CGA GGA CCG GTT GGC CGG        96
188
189              Ala Leu Ser Ala Gln Ser Cys Gly Pro Gly Arg Gly Pro Val Gly Arg
190                              20                  25                  30
191              CGG CGT TAT GTG CGC AAG CAA CTT GTG CCT CTG CTA TAC AAG CAG TTT       144
192
193              Arg Arg Tyr Val Arg Lys Gln Leu Val Pro Leu Leu Tyr Lys Gln Phe
194                          35                  40                  45
195              GTG CCC AGT ATG CCC GAG CGG ACC CTG GGC GCG AGT GGG CCA GCG GAG       192
196
197              Val Pro Ser Met Pro Glu Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu
198                      50                  55                  60
199              GGG AGG GTA ACA AGG GGG TCG GAG CGC TTC CGG GAC CTC GTA CCC AAC       240
200
201              Gly Arg Val Thr Arg Gly Ser Glu Arg Phe Arg Asp Leu Val Pro Asn
202              65                  70                  75                  80
203              TAC AAC CCC GAC ATA ATC TTC AAG GAT GAG GAG AAC AGC GGC GCA GAC       288
204
205              Tyr Asn Pro Asp Ile Ile Phe Lys Asp Glu Glu Asn Ser Gly Ala Asp
```

DATE: 12/17/1999
TIME: 04:38:14

RAW SEQUENCE LISTING
PATENT APPLICATION   US/09/451,939

INPUT SET: S34265.raw

PAGE: 5

```
                                                        90                            95
                                 85                                                          336
206
207        CGC CTG ATG ACA GAG CGT TGC AAA GAG CGG GTG AAC GCT CTA GCC ATC
208        Arg Leu Met Thr Glu Arg Cys Lys Glu Arg Val Asn Ala Leu Ala Ile
209                      100                     105                     110
210                                                                                          384
211        GCG GTG ATG AAC ATG TGG CCC GGA GTA CGC CTA CGT GTG ACT GAA GGC
212        Ala Val Met Asn Met Trp Pro Gly Val Arg Leu Arg Val Thr Glu Gly
213                      115                     120                     125
214                                                                                          432
215        TGG GAC GAG GAC GGC CAC CAC GCA CAG GAT TCA CTC CAC TAC GAA GGC
216        Trp Asp Glu Asp Gly His His Ala Gln Asp Ser Leu His Tyr Glu Gly
217                      130                     135                     140
218                                                                                          480
219        CGT GCC TTG GAC ATC ACC ACG TCT GAC CGT GAC CGT AAT AAG TAT GGT
220        Arg Ala Leu Asp Ile Thr Thr Ser Asp Arg Asp Arg Asn Lys Tyr Gly
221        145                     150                     155                     160
222                                                                                          528
223        TTG TTG GCG CGC CTA GCT GTG GAA GCC GGA TTC GAC TGG GTC TAC TAC
224        Leu Leu Ala Arg Leu Ala Val Glu Ala Gly Phe Asp Trp Val Tyr Tyr
225                      165                     170                     175
226                                                                                          576
227        GAG TCC CGC AAC CAC ATC CAC GTA TCG GTC AAA GCT GAT AAC TCA CTG
228        Glu Ser Arg Asn His Ile His Val Ser Val Lys Ala Asp Asn Ser Leu
229                      180                     185                     190
230                                                                                          624
231        GCG GTC CGA GCC GGA GGC TGC TTT CCG GGA AAT GCC ACG GTG CGC TTG
232        Ala Val Arg Ala Gly Gly Cys Phe Pro Gly Asn Ala Thr Val Arg Leu
233                      195                     200                     205
234                                                                                          672
235        CGG AGC GGC GAA CGG AAG GGG CTG AGG GAA CTA CAT CGT GGT GAC TGG
236        Arg Ser Gly Glu Arg Lys Gly Leu Arg Glu Leu His Arg Gly Asp Trp
237                      210                     215                     220
238                                                                                          720
239        GTA CTG GCC GCT GAT GCA GCG GGC CGA GTG GTA CCC ACG CCA GTG CTG
240        Val Leu Ala Ala Asp Ala Ala Gly Arg Val Val Pro Thr Pro Val Leu
241        225                     230                     235                     240
242                                                                                          768
243        CTC TTC CTG GAC CGG GAT CTG CAG CGC CGC GCC TCG TTC GTG GCT GTG
244        Leu Phe Leu Asp Arg Asp Leu Gln Arg Arg Ala Ser Phe Val Ala Val
245                      245                     250                     255
246                                                                                          816
247        GAG ACC GAG CGG CCT CCG CGC AAA CTG TTG CTC ACA CCC TGG CAT CTG
248        Glu Thr Glu Arg Pro Pro Arg Lys Leu Leu Leu Thr Pro Trp His Leu
249                      260                     265                     270
250                                                                                          864
251        GTG TTC GCT GCT CGC GGG CCA GCG CCT GCT CCA GGT GAC TTT GCA CCG
252        Val Phe Ala Ala Arg Gly Pro Ala Pro Ala Pro Gly Asp Phe Ala Pro
253                      275                     280                     285
254                                                                                          912
255        GTG TTC GCG CGC CGC TTA CGT GCT GGC GAC TCG GTG CTG GCT CCC GGC
256        Val Phe Ala Arg Arg Leu Arg Ala Gly Asp Ser Val Leu Ala Pro Gly
257                      290                     295                     300
258
```

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION   *US/09/451,939*

INPUT SET: S34265.raw

Line	Error	Original Text
31	Wrong application Serial Number	(A) APPLICATION NUMBER: US 08/900,220